ABSTRACT

A computer-aided writing system offers assistance to a user writing in a non-native language, as the user needs help, without requiring the user to divert attention away from the entry task. The writing system provides a user interface (UI) that integrates writing assistance with in-line text entry. When the user is unsure of a word's spelling or whether the word is appropriate, the user may enter a corresponding native word directly in line with the ongoing sentence. An error tolerant spelling tool accepts the native word (even if it is misspelled or mistyped) and derives the most probable non-native word for the given context. The spelling tool consults a bilingual dictionary to determine possible non-native word translation candidates, a non-native language model (e.g., a trigram language model) to generate probabilities associated with the candidates given the current sentence or phrase context, and a translation model to generate probabilities of how likely a certain native word was intended given the non-native word candidates. From these probabilities, the spelling tool determines the most probable non-native word translation and substitutes the non-native word for the native input string. If the user likes the non-native word, the user may simply continue with the sentence. On the other hand, if the user is still unsure of the non-native word, the user can invoke a sentence recommendation tool that allows the user to see the non-native word in a bilingual sentence pair to learn how the word can be used.